DOCUMENT RESUME

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IDENTIFIERS	Education Amendments 1974

ABSTRACT

This document contains two reports on the Classrooms beyond Walls Career Education Project conducted by the Mamaroneck Union Free School District and the Sound Consortium for grades K-12 in the 1975-76 school year. The final report summarizes the project's major objectives (increasing self-awareness and decision-making skills, training teachers in curriculum modification for career education, and coordinating more closely in the world of work and education), the learning activities of the school districts in the Consortium, the dissemination activities and goals of the Consortium, and the special problems of financial support and staff hiring and training. The summative evaluation report which was prepared by a third party discusses the preparation, administration, and analysis of (1) career education pretests/posttests for senior and eighth-grade English classes, high school science classes, and fifth- and sixth-grade newspaper units; (2) a pretest/posttest for the Career Internship Program, and (3) a staff questionnaire on attitudes toward career education. Recommendations in the evaluation report include the following: since community involvement is fundamental to this project, teachers and students need to learn more about and utilize more fully community employers and opportunities for educational experiences; career education classroom materials, such as curriculum guides, need to be developed; and a conceptual framework for career education should be created, describing the program content, its relationship to other subjects, and its sequencing over grades K-12. (ELG)

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OUTLINE FOR PROJECT PERFORMANCE REPORTS*

CAREER EDUCATION PROGRAM

1. Project No.:	2. Grant No.:	3. Nature of Report:
55-AH50391	G007502352	___Semi-annual __X__Final

4. Project Title:
Classrooms Beyond School Walls for Grades K-12

5. Period Covered By This Report:
From: 9/75 To: 6/76

6. Category of Project (as specified in 45 CFR 160d.5 and 160d.11):

__X__Incremental ___Settings ___Populations ___Training ___Communications ___State Plan

7. Project Director:	8. Grantee/Assistance Contractor Institution/ Address/Phone:
Judy Johnson	Mamaroneck Union Free School District 740 W. Boston Post Road Mamaroneck, N.Y. 10543 (914) 698-9000

9. Major Activities:
List, in specific terms, major accomplishments under each objective of the project during this report period. Include progress under both learner outcome and process objectives. Include any changes in objectives since last report.

10. Project Participants (include in final report only):
Completely and accurately fill out the attached form entitled "Career Education Program: Participant Summary."

11. Evaluation:
Describe implementation of the evaluation plan to date, including research design, instruments, and data collection plans and activities. Include any changes in the plan since last report. Present data showing project accomplishments and explain what led to these accomplishments. Present data indicating lack of success and explain what problems hindered success.

12. Anticipated Changes and/or Problems:
Describe any problems anticipated in implementing the project between this report and the next report. Discuss steps that will be taken to resolve problems. Include any changes in objectives, activities, or evaluation efforts planned.

13. Dissemination Activities:
Describe dissemination activities conducted during report period, including audiences, products developed, and results of dissemination. Attach copies of products, publicity materials on project, etc. Indicate planned dissemination activities between this report and the next report.

14. Special Activities:
Include any special or other activities that need to be reported, including efforts to reduce race and sex stereotyping in career choice and efforts to provide career education for handicapped persons, where these efforts are not reported under major objectives and activities.

15. Report Abstract (include in final report only):
Prepare a brief abstract of this report for use in communication with other career education practitioners and the general public. Abstract shall include all items under #1-8 above and a brief summary of information under items 9-12 and 14 above. Abstract shall be no longer than 1000 words.

*This page is an outline only. Do not write on this page. Follow this outline in completing your Performance Report.

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CAREER EDUCATION PROGRAM

PARTICIPANT SUMMARY

No. of Participants* Who Are:	Race/Ethnicity (all Participants including Handicapped, Gifted and Talented, and Low Income)						Of the Total, No. Who Are:			Of the Total, No. Who Are:	
	American Indian or Alaskan Native	Asian or Pacific Islander	Black/ Negro	Caucasian/ White	Hispanic	Total	Handicapped	Gifted & Talented	Low Income	Male	Female
Students:											
Elementary (K-6)	--	--	1144	6343	237	7724	--	--	--	3768	3956
Middle/Jr. High (7-9)	--	--	870	2925	215	4010	--	--	--	2001	2009
Senior High (10-12)	--	1	212	3900	107	4220	--	--	--	2474	1746
2-Year College											
4-Year College											
Adults (non-matriculated)											
Sub-total:	--	1	2226	13,168	559	15,954	--	--	--	8243	7711
Educational Personnel:											
Teachers	--	1	61	826	47	937				459	478
Counselors	--	--	--	26	--	26				17	9
Administrators	--	--	--	31	--	31				30	1
Members of the Business/ Labor/Industry Community:	breakdown not available					648					
Parents:	figures not available										
Other (specify): _____											
Total:		2	2287	14,051	606	17,596					

*Participants include those directly served by the project or, in the case of most parents and persons in the business/labor/industry community, who actively assist in project implementation. "Actively assist" includes efforts such as serving as resource persons, serving on Advisory Groups, providing work experience, etc.

Final Report
Mamaroneck Career Education Project
CLASSROOMS BEYOND SCHOOL WALLS
A Consortium Effort

The 1975-76 school year in Mamaroneck saw expanded classroom involvement in career education well beyond the school doors to the doors of industry and community. On the elementary school level, 24 participating teachers, grades 1-6, and 4 middle school teachers in the Career Education Task Force took their classes on a minimum of three field visits. That represents for Mamaroneck alone over 96 student-employer on-site contacts. The project director assisted teachers in this planning by:

1. Discussing the Cornell instrument developed by Dr. L. Fadelle: Why Take A Field Trip.

2. Assisting teachers in identifying those community resources that demonstrated a relationship to the on-going curriculum.

3. Reviewing with teachers appropriate questions their students planned to ask.

Field trips were utilized to:

1. Clarify information by providing students with the opportunity to see and possibly touch the products they read and talk about.

2. Provide students with the opportunity to interview workers and observe how people work together.

3. Provide students with the opportunity to see the correlation between curricular skills and work settings.

The Central School Career Resource Room was established for teachers and students. Staffed by volunteer parents - trained professionals - small groups of students were led through new activities to provide evaluation of effectiveness for total classroom use. Career education resources for teachers were made available; student activity cards that infused career concepts with basic skill

learning were also. Also housed here are games and activities that teachers can introduce to their students as enrichment career education activities.

On all levels, K-12, appropriate guest speakers were invited, at least twice during the school year.

Specifically, at the high school two career symposiums were planned. The initial one held in the fall focused on careers in government. Over 50 successfully employed people discussed the advantages and disadvantages of their jobs. Elected officials and civil servants described their careers.

Held in the spring was a symposium focusing on careers in Marketing and Advertising - organized, planned and executed by the volunteer members of our Youth Employment Service. The highlights are the bringing into the classroom of those speakers who wish to share with students their successes and failures as well as their present stories on achieving occupational success.

The Career Internship Program provides students with the opportunity to test their career interests while working with professionals who have volunteered to accept student interns. Students are able to explore career thinking beyond the world of school. It may provide the only chance students have to observe in the occupations they think they would like. Students receive school credit for their job, but are not paid. Over 100 students in Mamaroneck High School are involved.

The Work Study and Work Experience programs provide an opportunity for students over 16 years of age to continue their education and at the same time gain practical work experience under close supervision of the school and the employer. It allows students to participate in a basic, realistic and meaningful academic structure each day; then through a flexible schedule, they also will be able to work either in the school or for an outside employer. These students often come from families that need the additional financial support the students' income offers.

Youth Employment Service

Four districts have established:

a. Employment agency for students
b. Career information files
c. Community resource service - up-dated file
clearing house

Also at the high school, key teachers in Science and English identified those career education objectives they wish all students to achieve. Students will be able to:

- Identify the salary and other forms of payment for various positions
- Identify components of job descriptions related to the Courses Handbook
- Identify educational requirements for various positions
- Identify the positions that comprise various career clusters
- Demonstrate mastery of the technique of writing a business letter
- Give adequate oral expression in a structural simulated interview.

Guidance

The counselors in the high schools are expanding existing programs and seeding new programs that provide students with the opportunity to examine their attitudes, self-concepts, and decision-making skills. The current testing program provides for interest testing (Holland's Self-Directed Search; Strong's Vocational Interest Inventory).

An elective course in Decision-Making was implemented by the Guidance Department. The course is directed at helping students to make better and more satisfying decisions in such areas as college and career choices.

In our alternative high school program, a course in Contemporary Family Living was initiated. Developed in cooperation with the Career Education Department, it assists students to evaluate their future roles as economic, political social and working citizens.

Continuing assessment of career education at Mamaroneck High School indicates it is being infused through four basic formats: 1) Career Courses, 2) Career Centers, 3) Experienced-based Programs, 4) Career Themes.

1) Career Courses

a) Most course offerings in Practical Arts (that provide a saleable skill with course completion) identify entry level skills and occupational possibilities.

b) Modern English is a communications skills program that weaves decision making, self-awareness, and career preparation objectives into an examination of modern literature, plays, poetry and films.

c) Child Psychology, a dual-purposed course, introduces basic child psychology for self-understanding while exposing students to the field of employment in primary education. (A laboratory in pre-school experience is being explored).

d) Afro-Asian Studies, an established unit, compares and contrasts job roles in diverse cultures.

e) Work Survival Skills, a 9th grade spring semester course.

f) TV/Communications Media Workshops offer practical experiences in TV programming.

g) The banking program - a working bank for deposits/withdrawals staffed by student tellers.

h) P.O.S.T. - an interdisciplinary simulated life insurance company designed to reflect the activities of a real office setting which was the outgrowth of a department teacher-worker exchange program.

2) Career Centers (physical centers for self-instruction, self-testing and simulation activities).

a) The career education office offers curriculum concepts and instructional supplies, classroom activities, community resources for teachers.

- Offers self-inventory interest testing, career counseling and internship experiences for students.
- Maintains contact with community/business leaders who employ work experience and work study students.

b) YES - student resource and placement center staffed by community volunteers.

- Provides job placement and a library of career information for students.
- Maintains a file of community resources (people/places) for symposiums, class lectures and field visits.

3. Experienced-based Programs

a) Career Internship Program - for all students seeking career exploration experience.

b) Future Teachers of America.

c) K.I.C. - tutorial experimental.

d) Work Study and Work Experience Programs - paid work experiences for high school students.

e) BOCES - career skills training for selected students.

4. Career Themes

a) For grade 10 students: The career counseling program being expanded with the joint assistance of English, Guidance (grade 10 counselors) and career education.

b) Career symposiums offered through YES (a career cluster information service for all students).

In the elementary schools during April, the Career Education task force in each school, in cooperation with the librarians in the elementary and middle schools, initiated "Explore Careers through your Library Week." Guest speakers were brought into the libraries to:

1) demonstrate their occupation and tools of the trade
2) answer questions students have prepared
3) bring to life the relationship between skills learned in school and skills needed to perform a task.

Key teachers from the task force have continued to identify activities, workbooks and readers that infuse career education activities into their curriculum. These modules are then disseminated to other teachers in the same grade in the total consortium for consideration and possible implementation.

The middle school task force concerned with career exploration has utilized the career posters published by the North Dakota School for the Deaf. These posters take all the academic disciplines and in a special form, identify over 20 careers they can emanate from. The middle school program has identified which of the eight elements of career education can be met by which departments and which cluster exploration can be handled by which department. Activities to implement these goals included guest speakers, library research, field trips and agency or business placements for four hours of on-the-job experience.

Upon completion of grade 8 this year, participating students will have:

1) completed a simulated employment interview for a position reflecting his interest, age and abilities
2) been introduced to the 15 clusters and be able to identify at least how he may wish to further explore them
3) developed an awareness of interest, abilities and aptitudes in relation to occupations. (See evaluation, pages 31-33)

PROJECT CONSORTIUM ACTIVITIES

The consortium task force began the task of looking at what has occurred, assessing our efforts and redefining what direction is needed to move the project towards a well-defined and fully operational model. During the monts of February and March, the consortium task force met to:

1) review the objectives established

2) assess the degree to which we have sucessfully expanded a corps of teachers knowledgeable in career development

3) share the activities attempted to meet the objectives

4) discuss the tasks ahead necessary to plug the gaps in our models.

The monies requested represent an increase from what has been received in prior years. The district recognized however, that to begin to plug existing gaps means increased expenditures for staff development and for the acquisition of instructional supplies.

Infusion of this concept into the total curriculum will allow all students to recognize and capitalize on the increasingly close relationships between education and work that now exist and will exist in the future. The task is not yet finished.

Representatives from all the districts attended the following workshops. Consultant fees and stipends to cover the substitute pay for attending teachers came from the project grant.

WORKSHOP TITLE	GRADE LEVEL OF PARTICIPATING TEACHERS	FOCUS
1. All in a Day's Work M. Baygell, author	Grades 2-3	Teaching reading skills through career material
2. How to Teach Values Clarification As a Unit of Career Development Joe L. Goodman, Center for Humanistic Studies	Grades 5-8	Applying values concepts to classroom activities

3. Bread and Butterflies - Debby Wasserman, School Coordinator, Channel 13	Grades 4-6	Using TV media as a tool for career education
4. Infusing Career Education into the High School Curriculum - Dr. Laman Miller, Director, Secretary Education, N.Y.U.	Grades 9-12 (3 workshops for school administrators, department chairmen and staff)	Identifying the task of the high school teacher in helping students clarify career preparation
5. The Role of Chief School Administrator in Project Implementation - Carol Aslanian, Staff of Policy Studies in Education	Chief School Admin. District Super.	Program objectives and planning for implementation
6. Career Activities for the Middle School - Dr. Bob Blum, Career Education Coordinator, Jefferson County(Colorado) Schools	Grades 7 - 8	Identifying and demonstrating effective career education activities for the middle school student.

RYE CITY SCHOOL DISTRICT

PROJECTS DEVELOPED WITH PRIOR CAREER EDUCATION FUNDS

The Rye City School District continues to be vitally interested and involved in Career Education. Such interest and involvement has been vastly stimulated and facilitated through the district's participation in the Mamaroneck Career Education consortium. Within this setting, the districts find their current posture as one in which the following activities are evident or can be presented as accomplishments:

a) A College and Career Center has been established at Rye High School for the entire school system. The Center operates on a full-time basis, receives extensive use and is manned, for all practical purposes, by parent volunteers under the direction of the Guidance Department.

b) A substantial number of Rye High School seniors have been placed in independent study settings for the purpose of securing career orientation experiences as a part of the system's overall career education effort.

c) Structured career education electives have been made available to pupils at both the Middle School and High School levels. The High School program has been operational for four years and the Middle School program for two years.

d) The Rye School System, through its involvement in the Career Education Project, beginning in 1973 and continuing to date, has developed a number of career education curriculum units which have been infused into the system's curriculum and have been disseminated to other school systems as well.

e) The school system through active involvement at the career education coordination and leadership levels has been an active participant in the development of the career education project, curriculum design efforts, staff training, public relations, etc.

At present the primary thrust of the Rye City School District in relation to the project activities is to cooperate with other consortium personnel in effecting substantial increases in career education learning opportunities. The specific direction or perspective of efforts of the district can be best elaborated through the statement of three sub-purposes or goals:

a) Although the district has a broad, on-going and comprehensive interest in all facets of career education, it believes it can make its major contribution to the field if it concentrates its efforts on increasing career education opportunities and experiences for the vast number of pupils who can be aptly characterized as "academically able and college bound" young men and women who expect to enter and progress in a variety of professional, managerial, creative and artistic roles who constitute the majority of the student body.

This program thrust should in no way be construed to exclude from attention or to neglect those pupils who have non-college career aspirations. The needs of these pupils will be met. However, the District must be realistic in allocating its resources according to individual pupil needs represented in the system.

It might also be added that the Rye City School District does not present an isolated case in striving to meet the needs of such college-bound youth. There are numerous other school districts located both within and outside of the State of New York which serve similar student populations.

b) The Rye School System expects to participate in project activities during 1976-77 and thereafter, which calls for the expenditure of significant effort directed at the development of career education units, activities, materials, etc. to be infused into prescribed and known New York State curriculum strands.

The District perceives that this curriculum development effort will be centered around a career education matrix which will provide format through which career education experiences, instructional units, materials, and learning activities

can be infused into the state curriculum strands. The District perceives the building of such a matrix to represent a significant developmental task. In this regard, the District is cognizant of the fact that significant sources of data are already available upon which to build or design such a structured curriculum format.

c) Upon the completion of such a design matrix, the District would anticipate the correlation or interfacing of matrix elements into and/or with the goals, objectives and teaching and learning activities defined in known or established discipline-oriented curriculum strands.

It is the expectation of the Rye School District to initiate activities early in the summer of 1976 which will focus a continuing analysis of a comprehensive career education matrix. Points or junctures at which career educational experiences would best and most logically be infused into ongoing curriculum strands. It would be the hope and expectation of the Rye Schools that the scope of consortium staff competency, time availablity, interests, etc. would facilitate such an analysis at the elementary grades, at the middle or junior high school level and at the high school level. Participants would be members of the task force.

The Rye City School District perceives a very definite need to conduct more expansive activities towards securing a classification of business and industrial community resources in and surrounding Rye.

BLIND BROOK RYE UNION FREE SCHOOL DISTRICT

PROJECTS DEVELOPED WITH PRIOR CAREER EDUCATION FUNDS

The Blind Brook Rye Union Free School District consists of two schools, a K through 7 elementary and an 8-12 secondary school. Located in Westchester County, the schools have an enrollment of 834 and 490 students respectively, which are served by a total staff of 89 with 47 teachers in the elementary school and 42 teachers in the high school. The district is served by a district principal, two building principals and two assistant principals. The high school was opened in 1973 and is graduating its first class in June of 1976.

As a newly expanded school district, Blind Brook Rye has been concerned with an expanded staff which includes twenty-seven new teachers in the secondary school, expanded support services, curriculum development as new grades are added, the development of a school community which seeks to meet the needs of high school youngsters, a reorganization of the elementary school to include a middle school, and a district-wide five year plan to evaluate and articulate curriculum in all areas. The district has moved forward in career education.

We are now at the point where sufficient interest exists to begin a comprehensive effort to inculcate career education into the total program. The greatest drawback is the lack of a person who can assume this responsibility full time. The community has expressed its support by voluntarily staffing a Youth Employment Service and College and Counseling Information Center as well as supporting these agencies by providing experiences for our young people to become more familiar with career opportunities. The Board of Education has demonstrated its support as evidenced by the programs in existence thus far. The staff has already demonstrated its support and concern for career education by finding the time, in most cases above and beyond normal expectations to begin to explore the role of career

education in the curriculum. A Saturday workshop has already been conducted with minimal compensation for ten staff members from all curriculum areas to begin the infusion of career concepts into the curriculum.

The Career Education program thus far has included the following: the purchase and use of career education materials in the elementary grades, the development of a multi-disciplinary career education unit for the sixth grade, career exploration as a part of the eighth grade social studies curriculum, a Planning Guide for ninth and tenth graders which includes career education information, an interview system for all ninth and tenth grade students which includes career counseling, the establishment of a Youth Employment Center and College and Career Information Center, the administration of vocational interest inventories as a standard guidance procedure. This past year has seen the development of a Career Film Festival which is supplemented by supporting materials, e.g., books, pamphlets, a Career Exploration course for seniors which includes values clarification, exploration of specific careers, field trips, an "English for Survival" course which includes the development of such skills as preparing resumes, filling out applications, interview simulations, etc.; a Career Internship Program for Seniors.

PORT CHESTER PUBLIC SCHOOLS

PROJECTS DEVELOPED WITH PRIOR CAREER EDUCATION FUNDS

Port Chester responded initially to the voiced concerns of its parent community expressing alarm about the inadequate career preparation students were receiving. Entering a labor market already flooded with unemployed youth, they found their graduates ill-prepared for achieving success in entry level jobs. The Career Education Program instituted in the Port Chester High School in September, 1974, was designed to help students identify their own career interests, abilities, and aspirations and participate in making informed decisions regarding their educational and occupational goals.

The intent of the project was to: 1) enable students to explore career options in the community; 2) be exposed to information and exploratory career development experiences; and 3) promote positive attitudes towards work, school and the community.

Specifically, opportunities were designed to direct 11th and 12th grade students to select a minimum of five occupations which might have implications for post-secondary education, training or employment. From the occupational options identified, and explored, 12th year students could seek placement in the business, industrial and professional community for "on-site" and "hands-on" career experiences for periods ranging from one to four weeks. The Career Education Project team includes a field representative, a career guidance counselor, a career education coordinator, teacher and a secretary.

The Career Education Job Entry Field Representative is charged with the responsibility of arranging for the placement of students with business and industry. Acting as a liason between the school and business and industry; she works cooperatively with personnel, business personnel, and the advisory council in pro-

viding assistance to those students placed; and keeps all parties informed regarding problems that may arise and conditions which may require project modification; assisting in the assessment of student potential and needs; maintaining a library of occupational information materials coded in a single occupational classification; maintaining an individual student profile system to assist students in making curricular-vocational judgments.

Advisory Council - A career education advisory council is composed of representatives of the business sector, Westchester Coalition, community agencies, project personnel, school personnel, students and parents. At present there are 17 voting members and 8 non-voting members. The purpose of the council is to assist in the essential task of arriving at expected goal outcomes. The council, working closely with the school and the business sector offers suggestions on the basis of observations and reports made by the professional staff, students and parents. An important council assignment is to use its influence to relate the aims of the program to businesses thereby solidifying and reinforcing the work of the project staff.

Placement of Students - During the 1974-75 school year, 58 students were involved in the Career Education Program. Of these, 33 were Caucasian, 17 were Black, 7 were of Hispanic heritage, and 1 was a foreign exchange student. The students were placed in their "hands-on" investigation of potential career choices for periods ranging from 1 to 4 weeks. The majority of students were placed for the maximum time.

The total community (parents, educators, students) while extremely pleased with the results of the high school program, realize the task is far from complete. The Port Chester schools have identified for the consortium a team of teachers in each school who will serve as teacher-trainers for the purpose of developing those activities unique to Port Chester that meet K-12 objectives developed by the consortium.

DISSEMINATION ACTIVITIES

A demonstration program requires dissemination activities. The following represents what has occurred and will continue to be expanded upon by the consortium in the 76-77 school year.

LOCAL GOALS

1) Orientation to parent groups. Presentations have been made to Parent Teacher Councils in each of the districts. A slide presentation of students in action has been prepared for presentation to the Boards of Education.

2) Presentations to the community. Where appropriate, we have asked for time to describe the project to local community groups, senior citizens project, local Chamber of Commerce and CAP, a local group serving the needs of minority students.

3) Requests for materials - One office assistant has been assigned the responsibility for maintaining the file of requests for assistance that are received; where appropriate, those materials that may prove helpful are sent out.

4) Consortium newsletter has been distributed locally and nationally.

5) Newspaper articles. The local newspaper has presented several articles on the project. In addition, they have printed pictures of several of the key guest speakers in the career symposiums and "Explore Careers Through Library Week."

6) Copies of reports have been written to school administrators and federal monitors.

7) The Project Director, with assistance from the advisory council members, coordinates and relates activities of the project with other non-school programs related to career development (Explorer Scouts, Manpower, County Government, Community Colleges, BOCES Technical Centers, local colleges).

8) Project use of a wide-range of community members will spread information locally.

9) Participants (teachers, students, others) are encouraged to talk to groups about the purposes and achievements of the project.

REGIONAL AND NATIONAL GOALS

1) Consultant presentations. Project director has made time available to local school districts, county agencies and professional organizations.

2) Newsletter

3) Professional conference presentations this year:

a. Superintendent's Day - Middle Island School District
b. Westchester Chapter Retired Teachers Association
c. New York State Education Department - Towards Humanizing Education

4) The project director will maintain liason with the various offices of the New York State Education Department, the U.S. Office of Education, EPIC and with active career education projects in the country.

Dissemination:

Dissemination activities provided dual results. Sharing experiences with new districts expands the implications of the concept and affects the lives of additional students. The reactions and concerns raised by new districts affords Mamaroneck the opportunity to continually review and reflect on the direction and impact of existing programs. An evaluative sharing of experiences, activities and training procedures reduces the costs of replication for interested districts. They are able to adapt and adopt, thereby benefiting from the initial costs incurred in early project development.

SPECIAL PROBLEMS

Employing a Career Education Team

An effective career education program that has as a major objective:

1) Community awareness - identifying the need for career education
2) Teacher training - without which effective learning cannot take place
3) Identification of activities, strategies and methodology - effective for an incremental, longitudinal career education design

demands the employment (at least during the formative years) of several fulltime key personnel:

- a fulltime career education coordinator to orchestrate the activities, strategies and necessary articulation (within and outside the school community).
- two fulltime curriculum specialists (1 for K-6, 1 for 7-12) who are able to identify and meet the needs of the participating classroom teachers.
- one fulltime community resource specialist who identifies techniques and strategies of on-going community involvement.

The serious budget crunch experienced by school districts nationwide has reduced the amount of local monies available for new program development and additional staff hirings. Efforts must be made to re-direct activities and assignments of existing staff.

Financial Support

Financial support for program design must come from state and federal authorities. A major effort, however, must be made to insure that if federal/state monies are committed, they must be in sufficient amounts and (most importantly) must cover a reasonable period of time (3-5 years) to allow for installation, implementation, evaluation and redesign.

State and federal agencies must recognize that in today's educational budget crunch, if they wish to see the development of new programs, they must be

willing to financially support the program (in perhaps decreasing yearly amounts) until the districts have wholly accepted responsibilities.

Effective on-going evaluation ought to be a major concern of sponsoring federal/state agencies. Site visits, receipt of interim reports and evaluations must be followed by a written critique from appropriate government monitors. Local districts have no means of determining how the sponsoring agency views its progress.

Staff Training

One major problem that affects new program development is lack of time in the school calendar for staff training. As educational budgets are scrutinized, time previously allotted through in-service training, superintendent's conference days and half-day school sessions are being eliminated.

Staff training means providing funds for classroom substitutes which allows participating teachers to leave the classroom and participate in workshops. Even the awarding of in-service credit for program participation and development is coming under close scrutiny as school boards attempt to reduce or hold the line on increased earnings won by teacher unions.

Defining the Tasks

Opponents of career education can be heard to say that career education infusion reduces the importance of learning as a means of retaining and expanding our cultural heritage. The confusion results because of the lack of a clear definition of what it is and is not. While strategies and models must reflect the educational needs of the student body and the economic needs of each region, we are still talking about a universal concept -- that of incorporating into learning 1) a respect for the concept and ethics of work, and 2) a recognition of the need to identify one's talents, interests and abilities and the ability to relate that identification successfully to the world of work.

Summary

Mamaroneck schools have identified the purposes and realities of career education within budget constraints. The program will continue to expand and refine, efforts will continue to be directed to identifying sources of external funding for program development and staff training.

PROJECT ABSTRACT

Project No: 554AH50391 Grant No: G007502352 Final Report
Project Title: "Classrooms Beyond School Walls for Grades K - 12" 1975-76 incremental
Project Director: Judy Johnson Mamaroneck Union Free School District
(914) 698-9000 740 W. Boston Post Rd., Mamaroneck, N.Y. 10543

The Sound Consortium serves an area inhabited by approximately 90,000 persons. The districts are situated around Long Island Sound in southern Westchester County, which is located in the southeastern section of New York State. Included in the consortium are the Mamaroneck Union Free School District, Rye Neck School District, Rye Union Free School District, Rye City School District and Port Chester School District.

Levels/Groups Served: K-12 students, educational staff, business/labor/industry personnel. Type of area served: suburban.

Major Objectives:

1) To insure the infusion of those career education activities for grades K-12 that will equip all students upon graduation with increased self-awareness and career decision-making skills. Participating students will demonstrate an understanding of the options, alternatives and limitations existing in the world of work.

2) To insure realistic experiences for instructional staff if they are to effectively assist learners in gaining knowledge and understanding of career planning and development. Teachers will continue to be trained in curriculum modification for career development; additionally, we will focus on attitudinal change and the understanding of career concepts that will culminate in a commitment to the need for career education.

3) To insure accomodation of the increasingly close relationship between the world of work and the world of education, which was begun by the project earlier. We continue to work to increase the availability of persons from business/labor/industry and government to act as career educators. We actively seek their direct cooperation as members of the Business-Labor-Industry Council, and the establishment of exchange programs between business personnel and educational staff that will ultimately promote better understanding of the concepts of career development on the part of all.

Project Activities:

In each of the schools in the consortium school district, career education grade coordinators are identified. These individuals participating in training sessions led by the career education project director and her staff explore and examine the results of their career education efforts and develop goals for their respective grades.

These teams, representing grades K-8, agreed to be resource staff for their grade levels in each of their respective schools. Grade level workshops occur regularly to share ideas, materials, techniques and concerns. Workshop themes include focus for teaching decision-making, utilizing reading skills to increase career awareness, tools for teaching values clarification, identifying career preparation in the high school.

Classroom learning activities are a blend of orientational, exploratory and hands-on career development practices that guarantee every student learning experiences that demonstrate a relationship between work and theory.

Evaluation:

The evaluation design prepared by Policy Studies in Education is in formative and summary form. Ongoing evaluation:

1) assists us in improving student learning.
2) aids in clarifying the significant goals and objectives as a process for determining the extent students are learning in the desired ways.
3) insures a system of quality control in which it may determine at key steps in the learning process, whether the process is effective or not, and what, if any, changes must be made to insure its effectiveness.

AN EVALUATION OF

CLASSROOMS BEYOND WALLS CAREER EDUCATION PROJECT

MAMARONECK UNION FREE SCHOOL DISTRICT

MAMARONECK, NEW YORK

Submitted by:

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A DEPARTMENT OF EDUCATIONAL RESEARCH COUNCIL OF AMERICA

AUGUST, 1976

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INTRODUCTION

The Mamaroneck Union Free School District contracted with Policy Studies in Education (PSE) in the fall of 1975 to perform a third-party evaluation of the Classrooms Beyond Walls Career Education Project which had been funded for the 1975-76 school year by the Office of Career Education of the United States Office of Education. In consultation with the Project staff, it was decided that PSE's evaluation should be both formative and summative, although the primary focus would be on the summative evaluation of student learning and teachers' attitudes toward and implementation of career education.

Our formative evaluation activities which were designed to help the Project staff evaluate and improve the career education ongoing program and the procedures which were being designed and used for carrying out that program most often took place during PSE staff's frequent visits to Mamaroneck, subsequent progress reports and memoranda, and by telephone consultations. (For more detail about these formative evaluation activities, including our conclusions about and suggestions for the Project during the year, the reader should see our various site visit reports and memoranda which have already been transmitted to the Project staff. These activities will not be discussed in this final evaluation report.)

In October, 1975, PSE prepared the Mamaroneck Evaluation Plan which described the tasks, responsibilities, and timetable for the evaluation of Classrooms Beyond Walls during the 1975-76 school year. Based on discussions with the Project staff, PSE delineated both the work to be carried out by PSE itself as well as by the Mamaroneck staff evaluator. The evaluation was divided between these two parties on the basis of which one could most effectively and efficiently carry out the desired tasks.

The specific evaluation tasks were jointly agreed to by PSE and Mamaroneck. Decisions of which areas of the Project to evaluate were made according to which activities were furthest developed and most likely to produce change as well as according to which procedures could be afforded by the evaluation budget of the Project. The tasks which were settled upon were those for which the Project Director was willing to be held accountable during 1975-76. The Director, of course, held greater aspirations than those detailed in that Evaluation Plan for career education in general and for the effectiveness of her program in particular, but she did not wish to be held accountable for accomplishing those additional aspirations in 1975-76.

The three summative evaluation activities which will be discussed in this final report are: (1) preparation, administration, and analysis of career education pretests/posttests for senior English classes, eighth grade English classes, high school science classes, and a fifth and sixth grade newspaper unit; (2) preparation, administration, and analysis of a pretest/posttest for the students in the Career Internship Program; (3) preparation, administration, and analysis of a staff questionnaire on attitudes toward and knowledge and implementation of career education.

The student testing was to take place in the Mamaroneck Union Free School District, the evaluation of the Career Internship Program was for the Port Chester School District, and the staff questionnaire was to be used in the five school districts making up this Consortium (Mamaroneck Union Free School District, Rye Neck School District, Rye Union Free School District, Rye City School District, and Port Chester School District).

The results of the three summative evaluation activities are presented in the next section of this report. These results are followed by PSE's conclusions about and recommendations for the Classrooms Beyond Walls Career Education Project.

SUMMATIVE ASSESSMENT OF PROJECT ACTIVITIES

ASSESSMENT OF THE CAREER INTERNSHIP PROGRAM

A popular and very important aspect of the Classrooms Beyond Walls Career Education Project is the Career Internship Program which places students with employers in the community for internship periods of approximately one to four weeks. This excellent opportunity to observe workers in their everyday performance of their jobs is supplemented by individual and group guidance counseling sessions, completion of the "Self-Directed Occupational Search," the taking and analysis of aptitude tests and career inventories, and student use of the library of occupational information materials.

According to Port Chester's 1974-75 report, the intent of this program is to: "(1) enable students to explore career options in the 'community,' (2) be exposed to information and exploratory career development experiences, and (3) promote positive attitudes toward work, school, and the community."

In order to measure these high school students' (primarily twelfth graders) growth in career education knowledge and attitudes, PSE developed a student evaluation form in two versions--a three-page pretest and a six-page posttest (including the three-page pretest version). PSE staff administered the pretest to the participating students on February 11, 1976, and administered the posttest on May 15, 1976. While 31 girls and 22 boys took the pretest, 64 girls and 24 boys took the posttest; thus, our pretest and posttest student groups do not consist of exactly the same students.

PSE collected the completed questionnaires and then tabulated and analyzed them. The tabulated results presented on the Internship Program Student Evaluation Form itself follow this narrative.

Findings

On the first set of eight affective or attitudinal items (on which students responded on a scale from strongly agree to strongly disagree), the interns seemed to show only slight improvement in attitudes. It should be noted that affective learning is always much harder to produce than cognitive learning, however. The two items which showed the greatest increase in the number of students who selected the correct answer of either strongly agree or strongly disagree (in these two cases, strongly agree was the correct answer) indicated that the students believed: (1) that students in the Port Chester Internship Program should receive credit toward graduation for their internship experience; and (2) that students should have several work experiences--volunteer or for pay--before they leave high school. There was also a slight increase in the number of students who strongly agreed or agreed that every student should graduate from high school with a salable skill he or she can use on a job. The results of these latter two items seem to indicate that these student interns highly value work experiences during their high school years and feel they should be equipped to enter the job market upon graduation. A slight increase in the number of students who strongly agreed or agreed that it is important for secondary school students to talk to many different people about their work and their lives seems to support this interpretation further. The fact that students indicated that they should receive credit for their internship might indicate that they felt they treated this program as seriously as their regular academic courses perhaps because of the value they place on being ready to enter a job after high school. Since Port Chester is a predominantly working class town, these results are not surprising.

The greatest increase (from 64% on the pretest to 78% on the posttest) occurred in the number of students who disagreed or strongly disagreed that career education would be of greater long term value to boys than to girls. Since non-stereotyping of job opportunities and career roles is implicit in the tenets of career education, this evidence that this Program appears to be non-sexist is particularly gratifying.

The fact that there was a rather large drop in the number of students who felt that "hands-on" work experience similar to the Port Chester Internship Program should be included in every student's high school program is somewhat contradicted by later findings. It seems perhaps that this drop might reflect the students' unfamiliarity with the term "hands-on." Indeed, later on in the evaluation form, the students are asked whether this Program as it is designed now should be mandatory for all twelfth graders; the number of students who responded "definitely yes" increased from 15% on the pretest to 28% on the posttest, and the number of students who responded "maybe" increased from 38% on the pretest to 40% on the posttest. Furthermore, students were asked whether the Program should be available to all tenth, eleventh, and twelfth graders in Port Chester; the number of students who responded "definitely yes" or "maybe" increased from 76% on the pretest to 91% on the posttest. The results of these last two questions are so positive that they seem to overrule the students' response to the earlier affective item. The results of these later questions do indicate the students' high regard for the Internship Program. The student reaction to the program's being made mandatory for all twelfth graders is particularly noteworthy considering the movement away from requirements of any kind in the secondary schools today.

Students' knowledge of the relationship between their education and the community and its resources increased as a result of the Internship Program.

On the pretest, only 51% of the students were able to list one or two ways people in business and industry could contribute to a career education program in the schools; no student was able to list three ways. On the posttest, 68% of the students were able to list one, two, or three ways business and industry could contribute to a career education program, with 35% of these students being able to list three ways. This heightened awareness will, of course, be especially important when these students themselves are part of the business and industry community and can help future students in future career education programs.

On the whole, students felt they were involved in a program considered valuable by other students, teachers, the school principal, parents, and community employers. This gave them a sense of being involved in something important and perhaps made them more interested in learning more about career education. At the end of the Program, students were interested in learning more about various career education topics in school; they were especially interested in: (1) making career decisions; (2) identifying their interests, aptitudes, and values; (3) learning how to find and get a job; (4) studying job information--requirements, rewards, duties, responsibilities; (5) learning how to prepare a resumé, job application, or job interview. This information is certainly valuable to those in charge of the Internship Program as they plan the Program for 1976-77.

Furthermore, students were asked to rank individuals or groups in order of their importance in helping them learn about the world of work. The three most important groups listed did not change from pretest to posttest ranking; they were: (1) parents; (2) employers and workers; (3) teachers. In other words, students knew the value of employers, workers, and teachers in helping them learn about the world of work both before and after the Program. It is

especially interesting that parents, however, were ranked first both times. Those in charge of the Internship Program for next year could use this information to great advantage by involving parents in the Program to a greater degree and thus giving students the parental support they seem to need and recognize during this experience. Parent-student conferences, more frequent open houses, or parental visitation at the site of the internship would all be possible ways of including parents in the Program.

One of the most unique aspects of this Internship Program compared to other similar programs is the fact that students are taken out of their regular classes to participate in the Program. Of course, an obvious problem which would arise is the fear on the part of parents and teachers that students' grades will drop because of the extra pressure of this commitment. However, 70% of the students indicated that their grades stayed about the same as before the Program, and 6% of the students indicated that their grades rose during this period. In addition, 68% of the students noted that missing their regular classes in school during the internship period was not very harmful to them. Thus, the internship can truly be seen as an enriching experience and one which does not detract from the regular academic experiences of the students.

PSE also asked a set of questions on the posttest to determine how much knowledge students gained about the career field they explored. For instance, we asked the students to list two pros and two cons of the career they investigated. Only 53% of the students were able to list one or two pros (positive aspects) of the job they worked at, while only 33% were able to list one or two cons (negative aspects) of the job they worked at during their internship period. These results are not as high as we might have expected; however, our response rate on that question (52%) was rather low and might have indicated

that students did not understand the question we were asking or did not take time to give it any real thought. Perhaps, however, students were not learning as much factual career education information as they might have during the internship, since only 45% of the students felt that they knew about a variety of jobs in the field they explored during their internship and only 50% commented that their understanding of the adult world of work had increased greatly because of their internship experiences. In other words, while the internship experience may have been a positive one for the students as it affected their attitudes about the Program and, to some extent, about the world of work and future employment, their cognitive learning as a result of this internship did not seem to increase sufficiently.

An important aspect of the Program was the student's relationship with his or her employer in the community; the success of a student's internship experience would understandably be closely tied to the student's interaction with the employer. On the whole, students viewed the employers favorably. For example, 52% of the students felt their relationship with their employer was very satisfactory, while 22% of the students felt it was fairly satisfactory. Half the students felt that the Program gave them a chance to develop a good relationship with an adult outside of their own family, and 61% of the students commented that they would recommend their employer to other students planning to participate in the Program. In addition to the positive nature of the employer-student interaction, 57% of the students felt that other people at work at the internship site were not too busy to discuss aspects of their internship.job with them. We might have expected greater enthusiasm from the students about their working situations. These results indicate that the kinds of employers and placements which those in charge of the Program are selecting are somewhat appropriate for the Port Chester students, and about half of them would be excellent candidates for participation in the Program again.

PSE also attempted to determine how valuable various Program activities were for the students. Individual guidance counseling sessions in connection with the Internship Program were seen as the most valuable, followed by the taking and analysis of aptitude tests and career inventories, use of library occupational information materials and completion of the "Self-Directed Occupational Search," and group session guidance counseling. Since the group session counseling was rated fifth, those in charge of the Program might make some changes in those sessions for next year.

Finally, we asked students if their experience in the Program helped them make up their mind about the job they chose to work at--either that they were interested in pursuing this career choice or that they felt this career was not for them after all. Forty-four percent of the students responded that this experience had definitely helped them decide about this career choice, and 24% of the students responded that maybe the Program had helped them. Only 6% of the students responded that the Program had definitely been no help at all. In summary, these results speak fairly well for the Program. Taking students out of their regular classes for participation in this Internship Program is an innovative step and one which probably meets with a great deal of resistance on the part of some teachers, administrators, and parents. PSE feels, however, that the data gathered from these students indicate that they have become well adjusted to this intensive career education experience and that they value such an opportunity to get a firsthand look at the world of work.

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PORT CHESTER HIGH SCHOOL

Internship Program Student Evaluation Form

This questionnaire is designed for students participating in the Port Chester High School internship program in order to find out what you think about the program. The questionnaire is an important part of a study which Policy Studies in Education is carrying out for the Port Chester School District. Your answers can help shape new and existing career education programs throughout the state.

All questionnaires will be treated confidentially, and no responses will be presented in a way which will identify any individual. Of course, you do not have to answer any question about which you feel hesitant.

We thank you in advance for your time and cooperation.

Sex:	Females	Males
Pretest	31	22
Posttest	64	24

Date this questionnaire was completed:

Pretest February 11, 1976

Posttest May 15, 1976

No answer	Directions: Please read each statement carefully. Then put a check in the box which most accurately reflects your opinion about the statement.	PRE TEST / POST TEST: Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
0% / 0%	1. The only reason for working is to earn a living.	17% / 6%	23% / 30%	11% / 11%	32% / 44%	17% / 9%
% / 0%	2. Career education will be of greater long term value to boys than to girls.	2% / 3%	13% / 9%	21% / 10%	34% / 45%	30% / 33%
1% / 1%	3. The school guidance department should carry the primary responsibility for career education.	4% / 13%	36% / 32%	38% / 32%	21% / 20%	0% / 2%
% / 0%	4. Every student should graduate from high school with a salable skill he or she can use on a job.	32% / 32%	51% / 56%	6% / 9%	7% / 3%	4% / 0%
2% / 0%	5. "Hands-on" work experience similar to the Port Chester Internship Program should be included in every student's high school program.	26% / 24%	55% / 41%	8% / 32%	9% / 3%	0% / 0%
% / 1%	6. Students should have several work experiences - volunteer or for pay - before they leave high school.	19% / 28%	60% / 59%	13% / 9%	6% / 2%	2% / 1%
0% / 1%	7. It is important for secondary school students to talk to many different people about their work and their lives.	28% / 26%	47% / 57%	23% / 13%	2% / 3%	0% / 0%
% / 0%	8. The students in the Port Chester Internship Program should receive credit toward graduation for their internship experience.	36% / 49%	45% / 38%	15% / 8%	4% / 4%	0% / 1%

9. Please rank the individuals or groups listed below in order of their importance in helping you learn about the world of work. Put a "1" next to the most important, a "2" next to the second most important, etc.

PRETEST		POSTTEST
1	Parents	1
4	Mass media	5
3	Teachers	3
5	Other school personnel	4
6	Friends	6
2	Employers and workers	2
7	Other students	7
__	Other (please specify) _____	

10. What career education topics would you like to learn more about in school?

PRE%	POST %	
5	✓ 66	Identifying your interests, aptitudes, and values
31	50	Setting personal goals
55	69	Making career decisions
3	✓ 61	Study of job information - requirements, rewards, duties, responsibilities
3	45	Developing good work habits
15	31	Study of our economic system
3	60	How to prepare a resume, job application, or job interview
9	✓ 64	How to find and get a job
21	40	Improving decision making skills
0	0	None of the above
0	0	Other (please specify) _____
8	0	No Answer

11. List three ways people in business and industry can contribute to a career education program in the schools.

	PRETEST	POSTTEST
1.	30% named 1 way	2%
2.	21% named 2 ways	31%
3.	0% named 3 ways	35%
	49% No Answer	32% No Answer

12. Name three community workers whom you would call upon to discuss your career goals and plans.

	PRETEST	POSTTEST		
1.	13% named 1 contact	17%		
	(Name of contact)	(Job title)	(Name of business)	
2.	4% named 2 contacts	11%		
	(Name of contact)	(Job title)	(Name of business)	
3.	13% named 3 contacts	8 %		
	(Name of contact)	(Job title)	(Name of business)	
	70% No Answer	64% No Answer		

13. Please check how you think each of the following people or groups in your school district or community would answer the question: "How valuable is the career internship program for the students who are involved?"

	Very Valuable		Valuable		No opinion		Not very Valuable		Not valuable at all		No Answer	
Students	42	48	43	41	4	10	11	1	0	0	0	0
Teachers	45	45	42	42	11	10	2	3	0	0	0	0
School principal	43	46	30	36	21	14	4	3	2	1	0	0
Parents	60	62	32	32	6	5	2	0	0	0	0	1
Employers	26	34	59	58	13	6	2	1	0	1	0	0
	PRE%	POST%										

14. Should the Port Chester Career Internship Program as it is designed now be mandatory for all twelfth graders?

PRE%		POST%
15	Definitely yes	28
38	Maybe	40
36	Definitely not	18
11	No opinion	14

15. Do you feel that the internship program should be available to all tenth, eleventh, and twelfth graders in Port Chester?

PRE%		POST%
40	Definitely yes	58
36	Maybe	33
13	Definitely no	5
11	No opinion	4

POSTTEST ONLY

16. How long did your internship last?

10% 1 week
17% 2 weeks
13% 3 weeks
26% 4 weeks
25% Other (please specify) _____
9% No Answer

17. This length of time was:

22% too short because I liked it so much.
7% too short because I didn't get a chance to understand my job well enough.
33% just about right.
1% too long because I didn't like the job I chose.
2% too long because I understood my job quickly and was not challenged by it.
11% No opinion
13% Other (please specify) _____
11% No Answer

18. Describe briefly your internship placement, including your job description and the organization or company with which you were placed. (optional)

--Variety of descriptions--

19. During the period of your internship, how were your grades in school affected?

6% They rose.
70% They stayed about the same as before the internship program.
3% They declined.
2% Other (please specify) _____
19% No Answer

20. How harmful to you was missing your classes in school during the internship period?

1% Very harmful
2% Fairly harmful
20% Not very harmful
48% Not harmful at all
7% No opinion
22% No Answer

21. List 2 pros and 2 cons of the job you worked at during your internship.

No answer 3%

Pros (Positive aspects)	Cons (Negative aspects)
1. 18% listed 1 pro	1. 19% listed 1 con
2. 35% listed 2 pros	2. 14% listed 2 cons

22. How satisfactory was your relationship with your employer?

No answer 25%

52% Very satisfactory
22% Fairly satisfactory
0% Not very satisfactory
1% Not satisfactory at all

23. How valuable have the following services been to you?

	Very valuable	Valuable	Not applicable	Not very valuable	Not valuable at all	No Answer
Taking and analysis of aptitude tests and career inventories	10%	45%	14%	14%	8%	9%
Library of occupational information materials	11%	40%	16%	13%	7%	13%
Completion of the "Self-Directed Occupational Search"	10%	41%	15%	15%	10%	9%
Guidance counseling in connection with the internship program (individual sessions)	15%	47%	11%	10%	7%	10%
Guidance counseling in connection with the internship program (group sessions)	11%	34%	23%	18%	5%	9%

24. Did your experience in the internship program help you make up your mind about the job you chose to work at - either that you are interested in pursuing this career choice or that you feel this career is not for you after all?

44% Definitely yes
24% Maybe
6% Definitely not
25% No opinion
1% No Answer

No Answer	Directions: Please read each statement carefully. Then put a check in the box which most accurately reflects your opinion about the statement.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
15%	25. I was given enough responsibility in my internship job.	16%	31%	23%	14%	1%
3%	26. The internship program gave me the chance to develop a good relationship with an adult outside of my family.	14%	36%	22%	14%	1%
5%	27. Now I knew a variety of jobs in the field I explored during my internship.	16%	29%	19%	19%	2%
15%	28. I could have used more counseling from school personnel before the internship program.	8%	13%	17%	42%	5%
7%	29. I would recommend my employer to other students who are planning to participate in the internship program.	30%	31%	17%	3%	2%
16%	30. Most of the time the people at work were too busy to discuss aspects of the job with me.	6%	11%	10%	31%	26%
5%	31. I had to give up most of my extra-curricular activities in order to participate in the internship program.	5%	7%	13%	40%	20%
14%	32. I felt unsure of myself and my role on the job during most of the internship program.	5%	13%	18%	36%	14%
5%	33. My understanding of the adult world of work has increased greatly because of my experiences in the internship program.	15%	35%	26%	6%	3%
16%	34. I could have used more counseling from school personnel during the internship program.	6%	10%	21%	36%	11%

ASSESSMENT OF STAFF ATTITUDES, KNOWLEDGE, AND PRACTICES

Staff development is, of course, a crucial activity in most career education projects across the country. In this Consortium, the Project Director hoped to make the school staff (predominantly teachers) more favorable in their attitudes toward career education, more knowledgeable about career education, and more willing to implement career education in their classrooms regularly. The Project activities designed to accomplish this objective included conducting numerous workshops, meetings, and informal discussions.

PSE designed the staff questionnaire early in the school year and used it to pretest 42 staff members in the Consortium districts. At the end of the school year, a revised questionnaire was used with 54 staff members. The questionnaire was revised in the interim according to the Project Director's wishes because she felt it was too long for her teachers to complete easily. It should be noted that the pretest and posttest groups were not comprised of exactly the same staff members, although they were drawn from the same population of teachers whom the Project Director planned to influence during 1975-76.

The Project Director distributed and collected the questionnaires at the beginning and end of the year and returned them to PSE for tabulating and analysis.

Findings

On the whole, the teachers' attitudes toward career education were favorable both at the beginning and at the end of the year. For example, the great majority of teachers at both questionnaire administrations agreed that:

- career education helps students achieve different goals than vocational education does;
- present high school vocational education courses do not teach students enough about the world of work;
- if schools were career-oriented, they would be useful to more students; and
- a student's choice of career can be changed by career education in school.

In other words, the teachers seemed to understand the very real differences between career education and vocational education and seemed to think that career education could be influential and useful for students. Furthermore, 86% of the teachers on the pretest and 98% on the posttest strongly agreed or agreed that career education should be available to all students from kindergarten through grade 12. These results indicate that teachers were favorable toward the career education program throughout the school year and that the Project Director had a good base of support for the implementation of her program.

Some affective (attitudinal) questions did show significant change from the pretest to the posttest. Most of these changes were evidenced in questions dealing with high school students' career education work experiences. For instance, 76% of the respondents on the pretest and 88% on the posttest felt that "hands-on" work experience should be included in every student's high school program; in addition, 67% of the respondents on the pretest and 84% on the posttest felt that high school students should receive school credit for work experiences. Furthermore, 88% of the respondents on the pretest and 97% on the posttest felt that students should have several work experiences--volunteer or for pay--before they leave high school. Finally, 64% of the respondents on the pretest and 76% on the posttest felt that every student should graduate from high school with a

salable skill he or she can use on a job. All these data taken together suggest that teachers are very supportive of work experience for high school students and realize the fundamental and enriching role of career education in such work experiences. These findings are probably closely tied to the existence of successful career internship programs in several of the Consortium school districts, and the teachers' awareness of or involvement with the internship programs probably accounts for their increasingly positive attitudes toward such career education work experiences for older students.

Even though the community and its employers are also closely tied to such internship programs, PSE feels that the teachers' awareness of the importance of a community component to a career education program needs to be stressed. For example, 50% of the respondents on the pretest and 63% of the respondents on the posttest strongly agreed or agreed that most local businessmen, tradesmen, industry workers, and professionals would help with the career program in the schools. While there is an increase in positive attitudes evidenced here, almost 40% of the teachers are still uncertain by the end of the year that the community and its employers would be willing to participate in career education. This interpretation will be further substantiated in data discussed later.

Two of the greatest increases from pretest to posttest scores strengthen our conclusion that the teachers are convinced of the importance of career education throughout a child's school years. First, 14% of the respondents on the pretest and an incredible 91% of the respondents on the posttest believed that elementary school is not too early for a student to start thinking about career possibilities, thus admitting the importance of career education in the early grades as well as at the secondary level where career choices seem more imminent. Second, 55% of the respondents on

the pretest and 80% of the respondents on the posttest strongly agreed or agreed that the quality of education would be raised by an emphasis on jobs and work. This finding nicely summarizes and supports the interpretations made thus far.

In addition to the attitudinal items on which the respondents were answering on a scale from strongly agree to strongly disagree, several other questions measured the teachers' attitudes toward and understanding of career education. When asked for what kinds of students career education is important, over 70% on the pretest and over 85% on the posttest noted that it was important for all the types of students listed on the questionnaire: elementary, middle or junior high school, high school, college-bound, non-college-bound, handicapped, disadvantaged, gifted and talented, and dropouts. In other words, career education was viewed as important for all students. It is especially promising and noteworthy that career education was considered important for college-bound students by 93% of the posttest respondents and for non-college-bound students by 91% of the posttest respondents; in other words, the stereotype that career education is more important--and perhaps only important--for students going into the world of work after high school has effectively been broken down.

Indeed, 50% of the pretest respondents and 54% of the posttest respondents felt that the career education program was beneficial to almost all the students in their school, while 17% of the pretest respondents and 30% of the posttest respondents felt that the program was beneficial to most of the students in their school. This increase in positive attitudes is also reassuring. In fact, all posttest respondents felt that it was very or fairly important for their students to accomplish the goals and objectives of career education programs.

Teachers' practice of career education on a daily instructional basis is, of course, influenced by numerous factors. PSE tried to account for some of them in the questionnaire. For example, the data indicate that 39% of the posttest respondents had received between two and five days of training in career education, 9% had received between six and 20 days of training, and another 13% had received more than 20 days of training. In other words, most of these teachers had had enough training at least to understand the fundamentals of career education, and many had had enough to be able to implement career education activities on a regular and frequent basis. Furthermore, most respondents indicated that the training they had received had some or great influence on the extent to which they incorporated career education into their classroom or school activities.

PSE also believes that teachers are often influenced by what they believe to be others' attitudes and feelings about the importance of career education for students in their school system. It seems significant that the great majority of respondents indicated that they felt the following people and groups in their school district and community believed career education to be very or somewhat important: other teachers, principals, the superintendent, the school board, parents, and employers. If this is an accurate picture of the kind of support available to the Consortium Project, then the base of support for the Project extends well beyond the teachers in the system and is quite impressive indeed.

When assessing the implementation of career education in the classroom, PSE first asked teachers how career education should be taught. Forty percent of the pretest respondents and 52% of the posttest respondents believed career education should be taught through material infused into the entire classroom curriculum. In addition, 21% of the pretest respondents and 31%

of the posttest respondents felt it should be taught through material presented in class as well as individually by a specialist such as a guidance counselor. These findings taken together show both the teachers' understanding of the concept of infusion as well as their understanding of the value of additional staff specialists to supplement the infusion of career education in the traditional classroom curriculum.

When asked what career education topics the teachers had introduced to their students, only a handful responded that they had not introduced any. The most popular topics are listed here in order of the number of posttest respondents indicating their classroom use of them: (1) developing good work habits; (2) identifying interests, aptitudes, and values; (3) setting personal goals; (4) study of job information--requirements, rewards, duties, and responsibilities; (5) study of career clusters; and (6) making career decisions. Comparatively few teachers introduced the following topics: how to find and get a job, the study of our economic system, and how to prepare a resumé, application, or interview. Both developing good work habits and the study of career clusters showed dramatic improvement from the pretest to the posttest and may indicate that these ideas were either particularly well presented in Project activities or particularly well received by Project participants.

PSE further asked the teachers to comment on which topics seemed to be of most interest to their students. The three top choices on both the pretest and posttest administrations were: (1) identifying interests, aptitudes, and values; (2) setting personal goals; and (3) the study of job information --requirements, rewards, duties, and responsibilities. It is not surprising that the students responded well to these self-awareness and career awareness topics, and perhaps some of the teachers' favorite activities geared

to these topics might be compiled and disseminated throughout the districts. In addition, the Project may now want to turn to ways of implementing activities for other career education elements by focusing on them at future workshops.

To help teachers with career education activities, the Project may want to focus more attention on providing appropriate career education materials. When given a list of materials and asked to check those which were available to them and those which they used, seldom do the majority of teachers indicate the availability of or their use of any of the listed materials. Those career education materials which the teachers indicated were most available were: a list of goals and objectives, career education reference materials such as the Dictionary of Occupational Titles or the Occupational Outlook Handbook, audio-visual products, and curriculum guides. Those materials which a significant number of teachers indicated they used during the year were: a list of goals and objectives and career education reference materials such as the Dictionary of Occupational Titles or the Occupational Outlook Handbook. Career education materials which seem to be among the least available, and thus among those least used, were career education curriculum units, lessons, or learning activity packets. This is certainly one area in which the Project might want to work in the coming year. It is rare that teachers can innovate easily without appropriate curriculum materials being provided or without extensive curriculum development workshops during which they can produce their own.

Another area in which career education materials seem to be lacking is in the community component of career education. For instance, only 22% of the posttest respondents indicated that they had used catalogs of community trips, while only 15% of the posttest respondents indicated that they had used

catalogs of community speakers. There seems to be a lack of understanding on the part of teachers in the districts about the use of community career education resources.

This finding is further substantiated in another questionnaire item in which teachers were asked to indicate what their role was in career education. There was a drop from the pretest to posttest administration in respondents who indicated that part of their role in career education was using community speakers in classroom instruction and taking students on trips to workplaces. The Project should make a concerted effort in the coming year to emphasize the importance of community-school interaction in career education programs and should make this topic the focus of at least several workshops. Having community resource persons speak to the teachers themselves at these workshops or taking teachers to visit various workplaces and see firsthand the kinds of educational experiences available would be two easy ways to improve this portion of the Career Education Project.

It is also interesting to note that almost half the posttest respondents felt that part of their role in career education included: teaching existing career education units, lessons, or materials; teaching other career education lessons they created themselves; reviewing and selecting from existing career education materials; and developing career education instructional materials. Yet, comparatively few teachers thought materials such as these were available to them, and even fewer teachers actually used them. PSE reinforces its suggestion that curriculum materials in career education be emphasized and made available in the future.

Almost half the posttest respondents did feel that part of their role in career education was participating in and planning career

education for their school or other schools in their system and assisting teachers in their school or school system in career education. The teachers' feeling that they were being involved in the planning stages and that they were helping each other as a group do indicate that the Project made an impact in creating an accepting, receptive target population in a favorable support climate. The Project should be congratulated for its ability to do this.

When reviewing some available background data on the respondents, PSE discovered that over 80% of the pretest and posttest respondents had worked in the field of education for more than five years, while over 90% of the pretest and posttest respondents had worked outside the field of education for five years or less. This kind of combination could have produced teachers who were fairly traditional and resistant to change because of the length of time they had spent teaching or in other educational endeavors compared to the length of time they had been in other career fields being exposed to outside world of work influences. The fact that the Project has created such an overall favorable climate for career education is certainly to its credit. PSE feels that the Project's already successful efforts can only be made more effective by the kinds of specific suggestions offered throughout this section.

ASSESSMENT OF STUDENT LEARNING

In order to measure student learning in a number of different Project-developed courses, PSE provided test specifications for and critiques of Project-developed test instruments. Test items were written by the Project staff to match specified objectives for each course (as many as six items were created for each of six or seven objectives per course.) The instruments were pilot tested under the direction of the Project staff, and PSE gave technical assistance in the revision of the pilot instruments and the creation of the final test versions (shorter tests of the most appropriate items at the correct level of difficulty for the targeted students).

In all, test instruments were developed for: (1) a career education newspaper unit for fifth and sixth grade English classes; (2) an eighth grade career education unit; (3) a career education-infused senior English class; and (4) the Mamaroneck Internship Program.

Pretesting and posttesting (with the same instrument) was completed for the first three courses mentioned. Unfortunately, there was some difficulty in obtaining posttest scores for the Internship Program, thus precluding analysis of student learning for that program. However, with the extensive analysis of student learning conducted for the Port Chester Internship Program available to this Project, these Mamaroneck data are not so crucial as they might have been.

See the Project's final report for more detailed descriptions of the different courses; only evaluation results will be presented in this report.

Fifth-Sixth Grade Newspaper Unit

The fifth and sixth grade newspaper unit test was designed to provide evidence of student accomplishment of the following six objectives:

1. Identify specific language arts skills and their importance for specific newspaper occupations;
2. Identify the raw materials and processes of newspaper production;
3. Identify practices that support or violate the principles of freedom of the press;
4. Identify and interpret cartoons;
5. Identify workers in the newspaper field and their duties; and
6. Select newspaper occupations from a list of occupations and organize them under given department headings (editorial, mechanical, business).

Twenty-six items were pilot tested, and the final test version contained the most appropriate eighteen items.

Fifth Grade Results

A total of 22 subjects in the experimental class had both pretest and posttest scores. All of the experimental subjects were enrolled in one class. In contrast, the 36 control class subjects with both sets of scores were enrolled in four different classes. A number of subjects were randomly selected from each of the control classes, the number selected being a proportional amount of the class enrollment (the proportion was 22/36), in order to develop a control group of equal size to the experimental group.

A split-plot analysis of variance was then done on the total correct scores with the experimental vs. control distinction being the between-

block factor and the two testing occasions (pretest and posttest) the within-block factor. Any contribution to error variance made by class differences could not be readily handled, since variance due to such a factor was restricted solely to the control condition.

Findings

There was no significant difference between the experimental and control groups. All subjects significantly improved in performance on the posttest, irrespective of whether they were in experimental or control groups. The experimental and control groups did not significantly differ on either the pretest or posttest, and both groups showed the same degree of improvement.

In other words, the students who participated in the career education newspaper unit did not learn any more as a result of it that those students who did not participate. One hypothesis offered by the Project Director seems plausible. She commented that the teachers of the various classes talked together frequently and seemed to want to share the activities with all the students. Unfortunately, then, the control group classes were not strict uncontaminated controls. In the future, a greater effort will need to be made to identify control groups outside of the district and immediate area of teacher interaction.

The summary of the statistical analysis is presented in Table 1.

Table 1

Split-Plot Analysis of Variance of Total Correct Scores for Grade 5 Students

Source	1 df	2 MS	3 F	Significance Level
Experimental vs. control	1	25.10	1.05	$>.25$
Subjects/treatment	42	23.82		
Pre vs. post(time)	1	1029.56	59.31	$<.001$
Treatment x time	1	5.01	0.29	$>.95$
Time x subjects/treatment	42	17.36		

1. df = degrees of freedom
2. MS = mean square
3. F = F value used to test for statistical significance

Sixth Grade Results

There were 105 subjects in the experimental group who had both pretest and posttest scores. These subjects were enrolled in four different classes. In contrast, all of the control group subjects were enrolled in a single class and totalled only 15. In order to achieve maximum power and since proportionality existed between the two sets of subjects in the ratio of 7:1, a conventional analysis of variance was done. The specific analysis was a split-plot design in which the experimental vs. control treatment was the between-block factor and the within-block factor was the two testing occasions. Since different classes occurred only under the experimental condition, this was not a factor in the design.

Findings

There was no significant difference between the experimental and control groups. All subjects improved in performance, irrespective of treatment conditions. The experimental subjects did not significantly differ among the four classes studied, and they did not significantly differ from the control group at either the pretest or posttest. (The pretest means of the four experimental classes and the control class ranged from 8.40 to 8.71. The posttest means ranged from 9.96 to 12.41, with the overall experimental mean being 11.53 and the control mean being 11.67.) Both experimental and control subjects showed similar amounts of improvement.

In other words, once again the students who participated in the career education newspaper unit did not learn any more as a result of it than the students who did not participate. Again, the Project Director offered the same hypothesis of cross-fertilization among experimental and control group teachers and, perhaps to a certain extent, among the students themselves.

Two other plausible hypotheses might also be offered to explain the lack of difference between the experimental and control group students in both the fifth and sixth grades. First, the information included in this career education newspaper unit might be included in the traditional fifth and sixth grade curriculum already. Second, the information might be learned as a result of children's normal maturation, including influences from television and other mass media.

More carefully conducted control group testing in the future will offer the best understanding of this year's results and should definitely be undertaken by the Project in 1976-77.

The summary of the statistical analysis is presented below in Table 2.

Table 2

Split-Plot Analysis of Variance of Total Correct Scores for Grade 6 Students

Source	1 df	2 MS	3 F	Significance Level
Experimental vs. control	1	0.06	.002	$>.95$
Subjects/treatment	118	21.91		
Pre vs. post (time)	1	522.15	56.21	$<.001$
Treatment x time	1	0.86	0.09	$>.95$
Time x subjects/treatment	118	9.29		

1. df = degrees of freedom
2. MS = mean square
3. F = F value used to test for statistical significance

Eighth Grade Career Education Unit

The eighth grade test was created to measure student accomplishment of the following seven objectives:

1. Identify jobs for which specific language skills are needed;
2. Demonstrate a working knowledge of requirements for working permits and social security numbers;

3. Read and interpret a help wanted ad;

4. Identify sources of career information;

5. Identify educational requirements for various positions;

6. Demonstrate mastery of the technique of writing a business letter applying for a job as a newspaper carrier;

7. Demonstrate adequate oral expression in a simulated interview applying for a position as a newspaper carrier.

Twenty-three multiple choice questions and two open-ended questions (for the last two objectives) were pilot tested. The final test version was made up of the most appropriate 15 multiple choice questions and the two open-ended questions.

Thirteen subjects from one class comprised the experimental group. Twenty-one subjects from two classes with both sets of scores made up the control group. A split-plot analysis of variance was done on the total correct scores for this entire group of subjects. The experimental vs. control treatment conditions was the between-block factor and the two testing occasions the within-block factor.

Findings

The most important result is the interaction between the treatment condition and the two testing times. This indicates that the significant difference between the experimental and control groups is a function of when they were tested. Specifically, the experimental and control groups significantly differ only at the posttest (means=15.2 and 9.8, respectively) but not at the pretest (means=10.6 and 9.1, respectively). The experimental group showed a significant improvement in its scores (i.e., an increase of 4.53 units or more than 1 standard deviation unit improvement), while the

control group's performance was nearly the same at both the pretest and posttest (means=9.1 and 9.8, respectively). Since it is reasonable to assume that other salient factors were controlled, we can conclude that improvement on this test for eighth graders was due to the experimental treatment. In other words, the course did teach eighth graders new and important career education information which they would not have learned otherwise.

PSE then highly recommends the continuation of this course and the further use of the test developed this year. These results certainly indicate that these eighth graders' experience with career education was a successful one and that teachers must have taught this new information effectively.

The summary of the statistical analysis is presented in Table 3.

Table 3

Split-Plot Analysis of Variance of Total Correct Scores for Grade 8 Students

Source	1 df	2 MS	3 F	Significance Level
Experimental vs. control	1	189.19	7.51	<.05
Subjects/treatment	32	25.19		
Pre vs. post (time)	1	76.24	11.68	<.01
Treatment x time	1	61.66	9.44	<.01
Time x subjects/treatment	32	6.53		

1. df = degrees of freedom
2. MS = mean square
3. F = F value used to test for statistical significance

Career Education-Infused Senior English

The career education objectives originally set for the senior English students were not tested as planned. After reviewing those objectives, the English teachers decided they were not as compatible with the English curriculum as anticipated. Therefore, pretesting and posttesting occurred only for objectives dealing with participating in an oral interview, writing a business letter, and preparing a resumé.

For both the oral interview and business letter dependent variables, there were sufficient numbers of subjects in different classes to examine whether there were class differences noted in the trend between the two testing occasions. In the case of the oral interview, three classes were examined in a split-plot analysis of variance in which class was the between-block factor and the two testing occasions (pre vs. post) the within-block factor. Thirty-three subjects supplied the two sets of scores for the oral interview, and they were all considered the "experimental" group. In other words, there was no control group. The same analysis and design was used for the business letter variable, but in this case 39 subjects supplied the matched set scores from four different classes. The smallest number of subjects per class was nine in the case of the oral interview and six for the business letter.

For the resumé variable, too few subjects in two of the three classes examined had both pretest and posttest scores to permit an examination of the class variable. Twenty subjects from two classes (15 from one) had both scores, and they were collapsed into a single group. A t-test for mean difference on correlated samples was then done to test whether there was a significant difference between the mean pretest and posttest.

Findings for the Oral Interview Component

The interaction is the most salient finding. It indicates that the improvement over time was not shown by every class; two of the three classes did significantly improve but the other did not. The third class had pretest scores at nearly the same level as the other two classes' final scores. It may not have shown improvement because of their initial advantageous standing and the fact that students are not, on the average, rated higher than this. For the third class to have shown comparable improvement to the other two classes (an increase of 4-5 points), the students in this class would nearly all have had to make perfect posttest scores since their pretest mean was 19. Thus, it appears that the non-significant improvement of this group stemmed more from a ceiling effect in the minds of the rater and the greater ability of these students rather than from the lack of a "treatment effect." This would indicate that a more sensitive measuring instrument should perhaps be used in the future.

Of course, it is difficult to credit the program with significant improvement in student learning when a control group design is not used. Hopefully, control groups can be identified in 1976-77 in order to provide more sound data than are now available.

The summary of the statistical analysis is presented in Table 4.

Table 4

Split-Plot Analysis of Variance of Oral Interview Total Scores for Senior Students

Source	1 df	2 MS	3 F	Significance Level
Class	2	51.14	3.34	.05
Subjects/class	30	15.30		
Pre vs. post (time)	1	203.88	28.32	< .001
Class x time	2	33.09	4.60	.02
Time x subjects/class	30	7.20		

1. df = degrees of freedom
2. MS = mean square
3. F = F value used to test for statistical significance

Findings for the Business Letter Component

Students scored significantly higher on the posttest than on the pretest (pretest mean = 24.63, posttest mean = 28.97). There were no significant differences among the classes on the pretest, on the posttest, or in the amount of improvement between the two testing occasions. In other words, the trend for improvement can be generalized across different classes, so it does not appear that improvement is dependent upon a certain type of student population (class) or a certain type of teacher. Of course, without a control group it is difficult to say whether improvement stemmed from the experimental condition or was simply due to maturational and practice factors correlated with the passage of time. Again, a control group design should be planned for 1976-77.

A summary of the statistical analysis is presented in Table 5.

Table 5

Split-Plot Analysis of Variance of
Business Letter Total Scores of Senior Students

Source	1 df	2 MS	3 F	Significance Level
Class	3	10.43	0.37	>.75
Subjects/class	35	28.33		
Pre vs. post (time)	1	367.25	32.30	<.001
Class x time	3	4.90	0.43	>.75
Time x subjects/class	35	11.37		

1. df = degrees of freedom
2. MS = mean square
3. F = F value used to test for statistical significance

Findings for the Resumé Component

The t-test did show that there was a significant improvement from the pretest to posttest scores of these seniors on the resumé component of the English program. The improvement was more than two standard deviation units of original standing.

While these results are certainly favorable, PSE would again urge the use of a control group design to allow for the collection of more reliable data in 1976-77. Hopefully, with this headstart in planning the 1976-77 Project evaluation, the Project staff will have time to identify a carefully selected control group.

The summary of the statistical data is presented in Table 6.

Table 6

Results of the t-Test on
Resumé Scores of Senior Students

	Mean	t Value	Significance Level
Pretest	7.25	6.14	< .005
Posttest	12.00		

RECOMMENDATIONS

These concluding recommendations are based largely on the data presented in this final evaluation report of the three Project components for which PSE provided summative evaluations: the Career Internship Program; the staff questionnaire on attitudes toward and knowledge and implementation of career education; and the student testing in the fifth and sixth grades, eighth grade, and twelfth grade special career education units. Of course, PSE has also been influenced by its formal and informal contact with the Project during the course of this evaluation, 1975-76.

Two major recommendations seem to follow logically from the various conclusions made in the three sections of this final report. First, PSE feels that the community career education component of this Project needs to be further defined and focused. We realize that the community component of this Project is one of its fundamental concepts and thus needs more careful attention paid to it. The data indicate that, while students and professional staff members may have generally favorable attitudes about the use of community resources in career education activities and the relationship of the community to the school, more emphasis needs to be placed on cognitive learning about the community (its employers and opportunities for educational growth and experience) as well as practice for teachers in utilizing this valuable resource. Several specific suggestions for the sharpening of this Project component include:

- providing mentors in the Career Internship Program with a manual explaining their significant role in providing students with real job information--requirements, rewards, duties, etc.;
- involving these mentors in other areas of the Project, such as by using them as guest speakers at teachers' workshops or parents' meetings;

- offering more avenues of contact for teachers and community representatives and employers, such as at workshops, meetings, or evening forums;

- arranging internships for teachers in various community organizations and businesses; and

- providing teachers with free time in which they can investigate community workplaces on their own and perhaps subsequently generate useful and appropriate career education classroom lessons and materials.

The second area which PSE feels needs attention concerns career education classroom materials. Our data show that various career education materials (curriculum guides, units, lessons, learning activity packets) do not seem to be readily available to teachers, and consequently teachers are not using many curriculum materials for career education instruction. The Project may , of course, solve this problem in a number of ways, including:

- reviewing, selecting, and making available commercially produced career education materials for classroom instruction;

- canvassing other nearby career education projects (perhaps those in New York State) to obtain career education materials they have produced and evaluated locally; and

- setting aside some staff development time for classroom teachers to either compile favorite career education activities they have used in the past or develop career education materials from ideas recently presented in staff development workshops (the Project staff should, of course, then review, evaluate, and disseminate well written and interesting career education materials).

A final recommendation which is based more on our previous experience with the Project than on these specific data, but which nicely ties together some of the findings presented in this report, comes from suggestions PSE made to the Project Director in our site visit report of March 16, 1976. In summary, then, we recommend that the Project staff develop a conceptual

structure or framework for career education which would include the following elements:

- a definition of career education sharp enough to distinguish it from other instructional functions of the school;
- specific objectives for career education -- preferably expressed as what students at various grade levels will learn;
- a planned pattern for sequencing the eight career education elements across the various grades and for possible emphasis on one or several in each grade; and
- the relation of careers or career clusters to the various subject areas included in the school curriculum.

In other words, such a structure would lay out the content of the program, its relationship to subject fields, and its sequencing over grades K - 12. Lacking this conceptual structure, it is difficult for the staff to describe and interpret the full content of career education when dealing with the faculty and community, to explain to the faculty why certain objectives have been assigned to certain subject fields, and to help teachers conduct classroom activities in a planned sequence rather than conducting them at random. Ideally, specific career education curriculum materials would be keyed to each of the objectives included in the conceptual structure.

PSE feels that such a conceptual structure would effectively tie together the loose ends of the many successful Project efiorts. It would give the Project an overall framework within which it could function even more effectively in 1975-76.